In the Claims

The following list of pending claims replace any prior list of claims.

1. (original) A method for manufacturing a medical device, comprising:

forming a device body;

forming a first electrically conductive element on the device body;

forming a first electrode on the device body; and

operably connecting the first electrode and the first electrically conductive element.

2. (original) The method of claim 1, further comprising:

forming a second electrically conductive element on the device body; forming a second electrode on the device body; and operably connecting the second electrode and the second electrically conductive element.

3. (original) The method of claim 2, further comprising:

forming a device tip; and

affixing the device tip to the device body.

4. (original) The method of claim 1, wherein the step of forming the device body comprises:

extruding a first cylindrical body layer;

extruding a second cylindrical body layer;

placing the second body layer within the first body layer; and

bonding the second body layer to the first body layer.

5. (original) The method of claim 1, wherein the step of forming the device body comprises co-

extruding a first cylindrical body layer with a second cylindrical body layer.

6. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises co-extruding a first electrically conductive element within the device body.

- 7. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises electro-depositing a conductive material on a nonconductive portion of the device body.
- 8. (original) The method of claim 4, wherein the step of extruding the second cylindrical body layer comprises extruding the second cylindrical body layer over the first cylindrical body layer.
- 9. (original) The method of claim 4, wherein the step of forming a first electrode on the device body comprises the steps of:

forming a groove on at least a portion of the device body; depositing conductive material within the groove in a shape of the first electrode; and

in the event that a portion of the conductive material extends beyond an upper surface of the groove, removing the portion of conductive material.

- 10. (original) The method of claim 9, wherein the step of forming a groove on at least a portion of the device body is performed simultaneously with the step of forming the device body.
- 11. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises the steps of:

co-extruding electrically conductive material with the first cylindrical body layer; and

removing a portion of the first cylindrical body layer to expose at least a portion of the electrically conductive material.

12. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises:

coating a surface of the device body with an electrically conductive material; and

selectively removing at least a portion of the electrically conductive material from the device body.

- 13. (original) The method of claim 12, wherein the step of selectively removing at least a portion of the electrically conductive material from the device body comprises exposing at least a portion of the electrically conductive material to a chemical solvent.
- 14. (original) The method of claim 12, wherein the step of selectively removing at least a portion of the electrically conductive material from the device body comprises vaporizing at least a portion of the electrically conductive material with a laser.
- 15. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises extruding a conductive layer across at least a portion of the device body.
- 16. (original) The method of claim 15, further comprising:

extruding a second device body longitudinally encasing the device body and extruded conductive layer; and extruding a second conductive layer across at least a portion of the second device body.

17. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises:

feeding wire from a spool to a mandrel under tension;
positioning the wire with respect to an ultimate location along the device
body means of the mandrel; and
co-extruding the wire with the device body.

18. (original) The method of claim 4, wherein the step of forming a first electrically conductive element on the device body comprises:

forming a groove on an exterior surface of the device body; and placing a wire within the groove.

19. (original) The method of claim 16, further comprising the steps of:

forming a tip structure; and affixing the tip structure to the device body.

- 20. (original) The method of claim 19, wherein the step of forming a tip structure comprises:

 plating a metal electrode over a molded non-conductive tip shape;

 forming a via in the tip shape; and

 electrically connecting a trace to the metal electrode through the via.
- 21. (original) The method of claim 4, further comprising the step of affixing an adapter to a distall end of the device body.
- 22. (original) The method of claim 21, wherein the step of affixing an adapter to a distal end of the device body comprises:

aligning an adapter trace with the first electrically conductive element with an adapter trace; and

inserting a portion of the adapter into the distal end of the device body such that the adapter trace and electrically conductive element are operably connected.

23. (withdrawn) A method for manufacturing a medical device, comprising:

forming a skeletal structure comprising at least one electrode and at least one trace;

overmolding a nonconductive shaft over the skeletal structure; and removing a portion of the nonconductive shaft to expose a portion of the skeletal structure.

24. (withdrawn) A method for manufacturing a medical device, comprising:

extruding a first cylindrical body;

extruding a second cylindrical body;

forming a first electrically conductive element on the first cylindrical body; forming a first electrode on the first cylindrical body;

forming a second electrically conductive element on the second cylindrical body;

forming a second electrode on the first cylindrical body;

operably connecting the second electrode and the second electrically conductive element;

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operably connecting the first electrode and the first electrically conductive element;

placing the second cylindrical body within the first cylindrical body; and bonding the second cylindrical body to the first cylindrical body.

25. (withdrawn) The method of claim 24, further comprising the step of:

aligning the first and second electrically conductive elements in a plane; and

separating the first and second electrically conductive elements with a nonconductive layer.